- **34**. The peristaltic pump according to claim **22**, wherein the actuator is configured to engage the biased plunger to lift the biased plunger away from the tube and disengage the biased plunger to allow a spring to generate a force from the biased plunger against the tube.
- **35**. The peristaltic pump according to claim **22**, wherein the peristaltic pump is configured such that a force of the biased plunger applied to the tube by the biased plunger is produced by a spring and not the actuator.
  - **36**. A method for pumping fluid, the method comprising: biasing a plunger toward a tube;

opening a first valve in a first stage;

moving the plunger away from the tube in the first stage; closing the first valve in a second stage;

moving the plunger toward the tube in the second stage; disengaging the actuator from the plunger in the second stage; and

moving the plunger toward the tube to discharge fluid.

\* \* \* \* \*